

REMARKS/ARGUMENTS

Applicants would like to thank Examiner Dote for indicating that original Claim 6 is free from the prior art and would be allowable if rewritten in independent form to include all of the limitations of the base claim. Claim 12 is a new claim that includes the limitations of original Claim 6 and its base claim original Claim 1.

Applicants submit that Claim 12 is allowable. As the Examiner will note, Claim 12 contains all the limitations of canceled Claim 6 including its base claim (original Claim 1). Therefore, Claim 12 is allowable for the same reasons original Claim 6 is allowable. In addition, because Claim 12 is allowable, Claims 13-17 which depend from Claim 12 are also allowable.

The presently claimed invention involves a toner that comprises a resin binder, a colorant and externally added fine particles. In addition, the toner has certain physical properties as measured by storage modulus. These storage modulus values include a storage modulus at 60°C (G'_{60}) using a 7.9 mm parallel plate of from 3×10^8 to 1×10^9 Pa, a storage modulus at 70°C (G'_{70}) using a 7.9 mm parallel plate of from 7×10^6 to 3×10^8 Pa, and a G'_{60}/G'_{70} ratio of 3 or more and less than 30. The presently claimed toner provides durability that gives high-quality fixed images even in non-contact fixing methods.

None of the cited references teach or suggest the presently claimed toner.

The rejection of pending Claims 1, 5 and 7-9 under 35 U.S.C. §103(a) over Matsunaga (U.S. 5,707,771) combined with the references cited in items 12-15 of the Office Action is respectfully traversed.

Matsunaga describes a toner suitable for hot roller fixation that involves using a heating and pressing system. In this method, a hot roller surface and the toner image on a fixation sheet contact each other under pressure and the toner image is melt-fixed onto the fixation sheet. Matsunaga discloses that this type of contact method for forming images

utilizes toners with specific storage modulus properties. Specifically, Matsunaga discloses that a storage modulus (G'_{70}) in excess of 7×10^6 Pa is undesirable for these types of toners (column 5, lines 27-32). In addition, Matsunaga specifically describes toners with a storage modulus ratio G'_{60}/G'_{70} of at least 30 as providing the desired properties for contact type toners (column 4, lines 34-37).

The presently claimed invention involves a toner that can be used in applications such as non-contact fixing methods. A toner capable of being used in a non-contact fixing method has storage modulus properties that differ from a toner directed for use in contact fixing methods.

The presently claimed toner has a G'_{70} storage modulus of from 7×10^6 to 3×10^8 Pa. This is essentially above the desired G'_{70} storage modulus values described in Matsunaga. Therefore, Matsunaga generally teaches away from the presently claimed toner properties owing to the specific application for the toner described in Matsunaga. Similarly, Matsunaga describes a G'_{60}/G'_{70} ratio of at least 30 whereas the presently claimed toner claims a G'_{60}/G'_{70} ratio of 3 or more and less than 30. Again, the storage modulus requirements of the toner in Matsunaga are such that Matsunaga teaches away from the presently claimed toner.

Overall, the presently claimed storage modulus properties of the presently claimed toner are not suggested nor taught by Matsunaga. There is no suggestion or motivation found in Matsunaga to modify the toner described in Matsunaga to arrive at the presently claimed toner. Finally, the toner described in Matsunaga fails to suggest and teaches away from the storage modulus limitations of the presently claimed toner.

Therefore, the presently claimed invention is not obvious over Matsunaga in combination with any of the cited references listed in items 12-15 of the Office Action. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections under

35 U.S.C. §103(a) over Matsunaga combined with the references cited in items 12-15 of the Office Action.

Applicants respectfully request that the Examiner withdraw objections listed in items 2 and 3 on pages 2-4 of the Office Action. As the Examiner will note, the objections have been obviated by appropriate amendments to the specification and claims. Therefore, the objections are no longer tenable.

The rejections of Claims 2-4, 6, 8, 10 and 11 under 35 U.S.C. §112, second paragraph, have been obviated by appropriate amendments. As the Examiner will note, the claims have been amended such that they are free of the criticisms outlined under item 6 on pages 4-6 of the Office Action. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

For the reasons cited above, Applicants respectfully request that the Examiner withdraw the rejection of Claims 2-4, 10 and 11 under 35 U.S.C. §101.


In light of the remarks contained herein, Applicants respectfully submit that the present application is now in condition for allowance. Favorable reconsideration is respectfully requested.

Respectfully submitted,

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